



## IEOM Global Engineering Education

**JW Marriott Hotel, Kuala Lumpur, Malaysia**

**March 8-10, 2016**

**Website:** [http://ieomsociety.org/ieom2016/?page\\_id=49](http://ieomsociety.org/ieom2016/?page_id=49)

IEOM Society addresses the issues of Global Engineering Education. There are different levels of readiness of engineering graduates from various parts of the world. One of the main themes of this series is how to reduce the readiness gap around the world. The special focus is given to Industrial Engineering and Manufacturing Engineering including Engineering Management. Are the engineering graduates ready to take on the challenges of the current global economy? With the great success of Global Engineering Education Series of last IEOM conferences, IEOM 2016 KL Conference will have a dedicated session for the Global Engineering Education where distinguished speakers will discuss the readiness of engineering graduates for workforce around the world. Thirty six featured speakers will be from various part of the world to address engineering education challenges and opportunities.

Power point presentations/abstracts will be published in the conference proceeding and summary of the talk and bio of the speakers will be printed in the conference program.

### *Readiness and Competence of Engineering Graduates*

#### **Global Engineering Education Chairs**

**Dr. Funso Falade**, Professor at University of Lagos, Nigeria and President, African Engineering Education Association

**Dr. Abu Masud**, Interim Dean of Graduate School and Boeing Global Engineering Professor, Wichita State University, Kansas, USA

**Contact:** [info@ieomsociety.org](mailto:info@ieomsociety.org)

## PROGRAM (Global Engineering Education)

### March 8, 2016 (Tuesday)

07:00 – 17:00 Registration

08:00 – 09:15 **Session I:**

Dr. C. Chinnaraj, Professor of Mechanical Engineering and State Project Coordinator (TEQIP), Directorate of Technical Education, Chennai, Tamil Nadu, INDIA  
 S. Indra Devi, Senior Lecturer, Department of Languages, Centre for Languages and Human Development, Universiti Teknikal Malaysia Melaka  
 Ahmed E. Haroun and Salih O. Duffuua, Systems Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA

09:30 – 10:00 Welcome Address – VC UTHM

10:00 – 11:00 **Opening Keynote:** Dr. Ron Askin, Professor of Industrial Engineering and Director of the School of CIDSE, Arizona State University.

11:00 – 11:30 Break

11:30 – 12:45 **Session II:**

Professor Dr. Mushtak Al-Atabi, Dean, School of Engineering, Taylor's University, Selangor Darul Ehsan, Malaysia  
 Professor R. Natarajan, Former Chairman, AICTE, Former Director, IIT Madras, India  
 Dr. Christoph Wunck, Professor, Business Computing Systems, Industrial Engineering, Jade University, Wilhelmshaven, Germany

13:00 – 14:00 **Industry Keynote:** Dr. Anwar Ali Mohamed, O.R. Freelance Consultant, Penang, Malaysia and **Former Principal Engineer at Intel Malaysia**

14:00 – 14:30 Break

14:30 – 15:45 **Session III:**

Dr. Alok Verma, Ray Ferrari Professor and Chair, Department of Engineering Technology, Old Dominion University, Norfolk, Virginia, USA  
 Dr. Ramiro Jordan, Professor and Associate Dean of Engineering for International Programs, University of New Mexico, USA and ISTE founder, IFEEs ExCom  
 Dr. Mohammad Yeakub Ali, Professor and Head, Department of Manufacturing and Materials Engineering, International Islamic University Malaysia

16:00 – 17:45 **Session IV:**

Dr. Chan Chee-Ming, Associate Professor and Deputy Dean (Academic and Research), Centre for Graduate Studies, Universiti Tun Hussein Onn Malaysia  
 Dr. Ayham Jaaron, Asst. Prof. in IE, Director of Quality Assurance Unit, Director of ABET Centre, An-Najah National University, Nablus, West Bank, Palestine  
 Prof. Dr. Gunduz Ulusoy, Faculty of Engineering and Natural Sciences, Sabanci University, Istanbul, Turkey

17:30 – 19:00 **POSTER SESSION and Student Chapter Mixer**

### March 9, 2016 (Wednesday)

07:00 – 17:00 Registration

08:00 – 09:15 **Session V:**

Dr. Adagbonyin Moses Obiazi, Dean, Faculty of Engineering and Technology, Ambrose Alli University, Nigeria and President, African Engineering Deans Council  
 Dr. C. B. Gupta, Professor, Department of Mathematics, Birla Institute of Technology and Science, Pilani (Raj.), India x  
 Dr. Jafri Mohd Rohani, Head - Industrial Engineering Programme, Department of Materials, Industrial & Manufacturing Engineering, Universiti Teknologi Malaysia

09:30 – 10:15 **Keynote:** Ir. Dr. Zuhairi Abd. Hamid, Executive Director, Construction Research Institute of Malaysia (CREAM), Kuala Lumpur, Malaysia10:15 – 11:00 **Keynote:** Speaker from Proton Automobile

11:00 – 11:30 Break

11:30 – 12:45 **Session VI:**

Dr. Alfredo Soeiro, Associate Professor, University of Porto, Portugal and Past President - European Society of Engineering Education  
 Dr. Rosemary Seva, Dean of Gokongwei College of Engineering, De La Salle University (DLSU), Manila, Philippines  
 Dr. Asela K. Kulatunga, Senior Lecturer, Department of Production Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

13:00 – 14:00 **Keynote:** Dr. Rupy Sawhney, Heath Fellow in Business and Engineering, Professor of Industrial and Systems Eng., University of Tennessee, Knoxville, USA

14:00 – 14:30 Break

14:30 – 15:45 **Session VII:**

Dr. Md. Mizanur Rahman, Senior Lecturer, Faculty of Mechanical Engineering, University Technology Malaysia (UTM), Skudai, Johor Bahru, Malaysia  
 Dr. Pal Pandi Ammavasi, Associate Professor, Bharath Niketan Engineering College, Aundipatty, Tamilnadu, India  
 Dr. Eldon Caldwell, Director, Industrial Engineering Department, Engineering School, University of Costa Rica

15:45 – 16:00 Break

16:00 – 17:45 **Session VIII: Panel Session**

Dr. Abu Masud, Boeing Global Engineering Professor, Professor of Industrial and Manufacturing Engineering, Wichita State University, Kansas, USA  
 Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFEEs) and Resident Scholar - Marquette University  
 Dr. Funso Falade, Department of Civil & Environmental Engineering, University of Lagos, Akoka, Lagos, Nigeria and President, African Eng. Education Association  
 Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, St. Louis, Missouri, USA

19:00 – 22:00 CONFERENCE AWARD DINNER, AND CULTURAL PROGRAMS

**Award Keynote:** Hulas King, Director, Diversity, Professional Affiliations & Global Community Relations, Siemens PLM Software, St. Louis, Missouri, USA

### March 10, 2016 (Thursday)

07:00 – 17:00 Registration

08:00 – 09:15 **Session IX:**

Dr. Khairiyah Mohd Yusof, Director, Centre for Engineering Education (CEE), Universiti Teknologi Malaysia, Johor Bahru, Malaysia  
 Dr. Amar Partap Singh Pharwaha, Professor, Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University, Longowal, Sangrur, Punjab, India  
 Dr. Funso Falade, Department of Civil & Environmental Engineering, University of Lagos, Nigeria and President, African Engineering Education Association

09:30 – 10:15 **Keynote:** Dr. Hans-Juergen Hoyer, Secretary General of the International Federation for Engineering Education Societies (IFEEs)10:15 – 11:00 **Keynote:** Prof. Dr. Noraini Kaprawi, Dean-Centre for Graduate Studies, Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia

11:00 – 11:30 Break

11:30 – 12:45 **Session X:**

Dr. Kamel Hawwash, Professor in the School of Civil Engineering, University of Birmingham, UK and Immediate Past President of SEFI  
 Dr. Charles Mbohwa, Professor and Vice-Dean Postgraduate Studies, Research and Innovation, University of Johannesburg's (UJ), South Africa  
 Dr. S. C. Naik, Professor, Former Head of Chem Engg and Dean, National Institute of Technology, Rourkela, India and Past President, The Institution of Engineers

13:00 – 14:00 **Keynote:** Rajiv Ghatikar, Vice President and General Manager, Siemens PLM, ASEAN/Australasia

14:00 – 14:30 Break

14:30 – 15:45 **Session XI:**

Professor Khedidja ALLIA, Research Laboratory of Science in Industrial Process Engineering (LSGPI), USTHB - FGMGP, Bâb-Ezzouar, Algiers- Algeria  
 Shri. Mahesh Anant Kakade, Controller of Examinations, Shivaji University, Kolhapur and Chairman, Indian Society for Technical Education, Maharashtra- Goa  
 Dr. Hamid Parsaei, Prof. of Industrial and Systems Engineering, Texas A&M Univ. (College Station) and Director of Academic Outreach - Texas A&M Univ. Qatar

15:45 – 16:00 Break

16:00 – 17:45 **Session XII:**

Nidhi M B, A/Head Mechanical Engineering Department, MarBaselios College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India  
 Dr. P. Muredzi, Dean – School of Engineering & Technology, Harare Institute of Technology, Zimbabwe

17:30 – 19:00 **Closing Mixer**

# DISTINGUISHED SPEAKERS

## Tuesday (March 8, 2016)

### Session I: Global Engineering Education

8:00 – 9:15 am - Room Starhill 4

Session Chair: **S. Indra Devi**, Universiti Teknikal Malaysia Melaka

08:00 – 08:25 (Tuesday)



#### **Dr. C. Chinnaraj**

Professor of Mechanical Engineering and  
State Project Coordinator (TEQIP)  
Directorate of Technical Education  
Chennai, Tamil Nadu, INDIA

#### Global Engineering Education Challenges and Opportunities

Prof. Dr. C. Chinnaraj is a Professor of Mechanical Engineering, Government College of Engineering, Salem, Tamil Nadu, India. He is now a State Project Coordinator (TEQIP), Directorate of Technical Education, Chennai-25, Tamil Nadu, India. Dr. Chinnaraj has received Ph.D. and master from ANNA University, Guindy, Chennai and B.E (Mechanical) from Madras University, Chennai, India. He has 32 Years as a Teacher in various State Government Engineering Colleges, acted as Examiner, Question paper setter and Chairman for various University examinations. Governing and Academic Council Member for many Engineering Colleges and Polytechnic Colleges and guided many Undergraduate and Post Graduate student Projects. He also received certificate for Guiding the State level Student best Project (Solar Wind ventilated Drier) and assisted the head of Institution in development of department, starting of new Post Graduate degree course in thermal engineering and Institution.

Dr. Chinnaraj has 8 years in administrative line at Directorate of Technical Education, Chennai-25, Tamil Nadu initially as Assistant Director (planning) and then as Project Coordinator for the World Bank assisted Technical Education Quality Improvement Programme (TEQIP). He assisted the Commissioner of Technical Education in execution of State's various Schemes, starting of new Government Polytechnic and Engineering Colleges, curriculum/syllabus revision for Polytechnic Colleges, formation of skill development centre, Quality Circle and Teaching Learning Centre at Engineering Colleges and also for conducting Faculty Development Programmes. He visited leading Technical Universities in GERMANY, Peking University in BEIJING, CHINA and University of Buffalo, USA. Dr. Chinnaraj has served two times as State Secretary and Treasurer for Tamil Nadu and Puducherry State Indian Society for Technical Education (ISTE) Section and two times received the best section National award for the drive in the ISTE membership, starting of ISTE chapters, encouraging the institutions to conduct the State level and National level Programmes for faculty and students. Two times National Executive Council Member of ISTE and helped the Institutions to conduct the Faculty Development Programmes, National Seminar, Conference and workshop for Faculty and Students. He represented and Lead the Anna University Volley Ball Team.

08:25 – 08:50 (Tuesday)



#### **S. Indra Devi**

Senior Lecturer, Department of Languages  
Centre for Languages and Human Development  
Universiti Teknikal Malaysia Melaka

#### A Multiliteracies Approach in the Delivery of Engineering Education for Future Global Engineers: The Malaysian Context

S. Indra Devi who serves as a senior lecturer at the Department of Languages in the Technical University of Malaysia Melaka currently teaches Technical Communication and English for Professional Communication. She holds a Diploma in ESL from University Malaya, Bachelor Degree in Education (TESL) from Putra University Malaysia, Master in Arts (TESL) from The National University of Malaysia and presently she is about to complete her PhD in English Language Studies. With 30 years of teaching experience and as a consultant in the field of TESL and ESP, she conducts various courses for undergraduate engineers, teaching engineers and professionals in government and statutory bodies besides being a trainer for the IELTS examination. Her research interest include Engineering Education, TESL, ESP as well as Multimodal and Computer Mediated Communication. As an instructor in a technical university, she has gained vast practical experiences in relation to communication skills and competencies among engineers as well as its implication towards global engineering practice. She has authored various scientific journal articles on topics related to oral communication apprehension, communication competencies, strategic competence and oral presentations of undergraduate engineers besides designing assessments, needs surveys and language related courses for engineers. Her other research publications include topics related to university-industry strategic alliances, employer engagement in teaching and learning, and her most recent research is related to Multimodal and multiliteracies approach as well as neuroscience intervention in ESP instruction for engineers. She has authored several books and her recent book is Grammar for Technical Writing which was specifically written for engineers and was published by Pearson Publishers. She is also active in various community projects and leadership posts. Due to her excellent achievements, she has received the award for Excellence in Service from UTaM in 2014.

08:50 – 09:15 (Tuesday)

#### An Effective Organizational Structure to Implement Strategic Plans In Higher Education Institutions

Ahmed E. Haroun and Salih O. Duffuua  
Systems Engineering Department  
KFUPM, Dhahran, KSA

## Session II: Global Engineering Education

11:30 am – 12:45 pm - Room Starhill 4

**Session Chair:** Dr. Christoph Wunck, Jade University, Wilhelmshaven, Germany

11:30 – 11:55 (Tuesday)



### Professor Dr. Mushtak Al-Atabi

Dean, School of Engineering  
Taylor's University  
Selangor Darul Ehsan  
Malaysia

**Bio:** Professor Mushtak Al-Atabi is currently the Dean of School of Engineering at Taylor's University, Malaysia. His research interests include engineering, entrepreneurship, education and leadership. He is an Honorary Chair at the School of Mechanical Engineering of the University of Birmingham (UK) and the Editor-in-Chief of Journal of Engineering Science & Technology. Professor Al-Atabi published two books, "Think Like an Engineer" and "Driving Performance" and he has numerous research publications, awards and honours. He is a Co-Founder of the Global Challenges Alliance, Fellow of the Institution of Mechanical Engineers (FIMechE) and an ExCo of the Global Engineering Deans Council. Professor Al-Atabi is an innovative educator; he pioneered the CDIO (Conceive, Design, Implement, Operate) and delivered the first MOOC (Massive Open Online Course) in Malaysia. He trains executives from Multinational Corporations including banks and energy companies.

11:55 – 12:20 (Tuesday)



### Professor R. Natarajan

Former Chairman, AICTE  
Former Director, IIT Madras, India

#### Emerging Engineering Education Challenges and Opportunities – Indian Perspectives

R Natarajan received his M.A. Sc and Ph.D degrees from the University of Waterloo, Canada. He has worked as a National Research Council Fellow in Canada, and as a Humboldt Research Fellow in Germany. He served as The Director of the Indian Institute of Technology, Madras from 1995 to 2001, and as the Chairman of The All India Council for Technical Education, a statutory body of the Government of India, from 2001 to 2004. He was the Vice – President of The Indian National Academy of Engineering during 2002-2006, and the Chairman of the Research Council of the Central Fuel Research Institute, Dhanbad during 1995-2005. He is a Fellow of: Indian National Academy of Engineering, Indian Society for Technical Education and several other Professional Societies. He has been conferred Honorary Doctorate Degrees by: The University of South Australia, Jawaharlal Nehru Technological University (A.P.), and four other Indian Universities. He has been a Member of the Editorial Boards of: Fuel (London), Fuel Science and Technology, ASEE Journal of Engineering Education, and several other Journals.

12:20 – 12:45 (Tuesday)



### Dr. Christoph Wunck

Professor  
Business Information Systems, Industrial Engineering  
College of Management, Information, Technology  
Jade University  
Wilhelmshaven, Germany

#### "Computer Science Education for Industrial Engineers - Meeting the Challenges of the Smart Factory Paradigm"

Prof. Dr. Christoph Wunck holds a full professorship for Business Information Systems at Jade University since 1999. He teaches courses on Distributed Applications, Software Engineering, Programming, Electronic Business Systems and Process Management. He holds a doctoral degree from the faculty of Mechanical Engineering and a Master's degree (Diplom-Ingenieur) in Electrical Engineering, both from RWTH Aachen University. He is the current director of the Institute of Information Processing in Plastics Manufacturing at Jade University.

His professional experience covers project management and consulting services for a major European business consultancy and work as a consulting engineer for manufacturing and electronics industries. He has served Jade University for nine years in the position of Dean and Dean of Studies.

His research interest include:

- Application of IT and Business Information Systems in Industrial Engineering
- Distributed Manufacturing Execution Systems, Multi-Agent Systems, Data Science, Manufacturing Intelligence
- IT Governance and Security in Operations and Supply Chain Management

Prof. Dr. Wunck is well connected in his field. He serves in the management of conferences and is a reviewer for conference papers and books. He is a member of IEEE Industrial Electronics Society, IEOM, INFORMS, ISCA, ISACA and VDI.



**Session III: Global Engineering Education****2:30 – 3:45 pm (Tuesday) - Room Starhill 4****Session Chair: Dr. Mohammad Yeakub Ali**, International Islamic University Malaysia

2:30 – 2:55 (Tuesday)

**Dr. Alok Verma**

Ray Ferrari Professor and Chair  
Department of Engineering Technology  
Old Dominion University  
Norfolk, Virginia, USA

**Bio:** Dr. Alok K. Verma is Ray Ferrari Professor and, Chair of the Engineering Technology Department at Old Dominion University. Dr. Verma also serves as the chief editor of the International Journal of Agile Manufacturing. Prof. Verma received his B.S. in Aeronautical Engineering from IIT Kanpur, MS in Engineering Mechanics and PhD in Mechanical Engineering from ODU. Prof. Verma is a licensed professional engineer in the state of Virginia, a certified manufacturing engineer and has certifications in Lean Manufacturing and Six Sigma. He has organized several international conferences as General Chair, including ICAM-2006, ICAM-1999, Lean Educator Conference and also serves as associate editor for two International Journals. His scholarly publications include 35 journal papers and 55 papers in conference proceedings. Dr. Verma has developed and delivered training program in Lean Enterprise & Design for Manufacturing for Northrop Grumman Newport News, STIHL and several other companies in U.S. At ODU, he has developed the Automated Manufacturing Laboratory. He was PI on several funded projects from National Shipbuilding Research Program (NSRP), National Science Foundation (NSF) and Department of Education (DOE). He is well known internationally and has been invited to deliver keynote addresses at several national and international conferences on Lean/Agile manufacturing. Dr. Verma has received the Regional Alumni Award for Excellence, the International Education Award at ODU and Ben Sparks Medal by ASME. He is active in ASME, ASEE, SME, IIE and SNAME. Dr. Verma continues to serve the Hampton Roads community in various leadership positions.

2:55 – 3:20 (Tuesday)

**Dr. Ramiro Jordan**

Professor and Associate Dean of Engineering for International Programs  
Department of Electrical and Computer Engineering  
University of New Mexico  
ISTEC founder, IFEEES ExCom

Dr. Ramiro Jordan is a scientist, innovator, educator and entrepreneur. He is a faculty member of the Electrical and Computer Engineering (ECE) department at the University of New Mexico, and is currently the Associate Dean of Engineering for International Programs. His research activities include sustainability, Smart Grid, cognitive radio, multi-dimensional signal processing, and software development. He is a dedicated educator, actively creating educational infrastructure in academic institutions worldwide with emphasis on the "culture of quality" in educational programs for accreditation and certification. He is driving innovative curricula development programs such as *Peace Engineering*, is establishing International Graduate Double Degree programs and is creating opportunities for student engagement and leadership development. He was actively involved with the University Faculty Senate and served on the Operational

Committee that, with the Faculty President, ensures shared governance of the University. Dr. Jordan holds a faculty position at the Universidad Nacional de La Plata, Argentina, and has served as visiting and resident professor at universities in Brazil, Costa Rica, Chile, Mexico, Peru, Bolivia, Argentina, Uruguay, Colombia, Ecuador, Paraguay, Spain, and Venezuela, among others.

Dr. Jordan is a founder of the Ibero-American Science and Technology Education Consortium (ISTEC), a successful non-profit organization that was created in 1990 with the mission to accelerate STEM education, R&D and entrepreneurship in Latin America and the Iberian Peninsula. ISTEC is comprised of over 100 educational, research, industrial, and multilateral organizations throughout the Americas and Iberia, and is now reaching into the global arena.

Dr. Jordan is a recognized leader in his field and serves on the Board of Directors of several industrial and professional organizations. He served as Vice President for the Americas Region and is currently in the Executive Committee of the International Federation of Engineering Education Societies and is VP for the Americas. He is on the Board of the *Engineering for the Americas Initiative*, an initiative hosted by the Organization of American States involving all Heads of State in the Americas Region. He is advisor to the International Conference in Engineering Education (ICEE) and advisor to the Institute of Electrical and Electronics Engineers (IEEE) Latin America Region, IEEE Senior member. He served as a member of the National Academy of Sciences of Bolivia, as special consultant to the Latin American ambassadors to the United Nations in the area of Science and Technology, and is advisor to several governments and multilateral organizations (OAS, IADB). He has been involved in the creation and enhancement of over 12 international Technology Parks and has fostered entrepreneurial activities worldwide. He was the Executive Vice-president and Chief Development Officer for Gridline Communications Holdings, Inc. a startup company.

An active member of scientific and professional societies including ASEE and IEEE, Dr. Jordan has published extensively in books, journals, magazines and on the Web. He serves on the editorial board of *Computers and Software Engineering*, is editor of *Journal of Computer Science and Technology*, and is editor and advisor to *The Ibero American Journal on Technology in Education and Education in Technology*. In addition to conference presentations, he has given over 80 invited Keynote presentations. He has received many national and international Honors and Awards including two *Silver Quilt Awards*, Motorola; *International Excellence Award*, University of New Mexico; *Growing with Technology Award*, Cisco Systems; *Professional Progress Award*, Kansas State University; *Award for Contributions in Higher Education and Science and Technology*, Organization of American States; *Achievement Award for Innovations and Accomplishments in Multilingual IT Infrastructure in Engineering Education*, iNEER-ICEE; and Award for Meritorious Work in Engineering and Computer Education, International Conference on Engineering and Computer Education. He is bestowed with the Order of Rio Branco, in the rank of Officer, by the Brazilian Government.

Dr. Jordan obtained his MS and Ph.D. in Electrical and Computer Engineering from Kansas State University in 1984 and 1987 respectively, and the degree of Telecommunications Engineer at the Universidad Nacional de La Plata in 1981.

3:20 – 3:45 (Tuesday)



**Dr. Mohammad Yeakub Ali**

Professor and Head

Department of Manufacturing and Materials Engineering

Faculty of Engineering, International Islamic University Malaysia

Kuala Lumpur, Malaysia

**Malaysian Engineering Education and Accreditation**

Dr. Mohammad Yeakub Ali is a Professor in Manufacturing Engineering. Currently he is the Head of the Department of Manufacturing and Materials Engineering at Kulliyah of Engineering, International Islamic University Malaysia (IIUM). Upon completion of his PhD. in 2002, he started his career as a Research Fellow in Precision Engineering and Nanotechnology Centre at Nanyang Technological University, Singapore. He then joined IIUM as an Assistant Professor in 2004 in the Department of Manufacturing and Materials Engineering. Since then, he engaged actively in teaching, research, supervision, administration, securing research grants, and publishing research findings in reputed journals and proceedings. He has published more than 200 technical papers in different reputed journals and conference proceedings at national and international level. He is also reviewer of many reputed international journals and funding projects. He is actively involved in professional societies and institutions including IMechE (UK), ASME (USA), euspen (Europe), IEM (Malaysia), IEB (Bangladesh), and BSME (Bangladesh). He holds various positions in organizing international conferences such as Technical Chair for ICAMME 2012, Chairman for ICAMME 2014, and Technical Committee for AMPT 2009.

Department of Manufacturing and Materials Engineering. Since then, he engaged actively in teaching, research, supervision, administration, securing research grants, and publishing research findings in reputed journals and proceedings. He has published more than 200 technical papers in different reputed journals and conference proceedings at national and international level. He is also reviewer of many reputed international journals and funding projects. He is actively involved in professional societies and institutions including IMechE (UK), ASME (USA), euspen (Europe), IEM (Malaysia), IEB (Bangladesh), and BSME (Bangladesh). He holds various positions in organizing international conferences such as Technical Chair for ICAMME 2012, Chairman for ICAMME 2014, and Technical Committee for AMPT 2009.

**Session IV: Global Engineering Education**

**4:00 – 5:15 pm (Tuesday) - Room Starhill 4**

**Session Chair: Dr. Gunduz Ulusoy, Sabanci University, Istanbul, Turkey**

4:00 – 4:25 (Tuesday)



**Dr. Chan Chee-Ming**

Associate Professor and Deputy Dean (Academic and Research)

Centre for Graduate Studies

Universiti Tun Hussein Onn Malaysia

Batu Pahat, Johor, Malaysia

**Bio:** Chee-Ming Chan is an Associate Professor with the Civil Engineering Technology Department, Faculty of Engineering Technology, Universiti Tun Hussein Onn Malaysia. She is presently holding the office of Deputy Dean in Academic and Research at the Centre for Graduate Studies in the University. Her area of expertise includes geo-materials, engineering education and higher education improvement. More recently, Dr. Chan's current work on dredged materials from Malaysian waters has gained momentum and support from the Ministry of Science, Technology and Innovation and Department of Marine, Malaysia. She is also involved in professional bodies, including the Society for Engineering Education Malaysia (SEEM), Malaysian Geosynthetics Society (MyIGS), Institution of Engineers Malaysia (IEM), Board of Engineers Malaysia (BEM), and is an education quality auditor for the Malaysian Qualification Agency (MQA). From 2009-11, Dr. Chan served as a Postdoctoral Research Fellow at the Port and Airport Research Institute (PARI), Japan.

4:25 – 4:50 (Tuesday)



**Dr. Ayham Jaaron**

Asst. Prof. in Industrial Engineering

Director of Quality Assurance Unit

Director of ABET Centre

An-Najah National University

Nablus, West Bank

Palestine

**Bridging the Gap between IE Qualifications and Employers Requirements: lessons from Palestinian IE Programs**

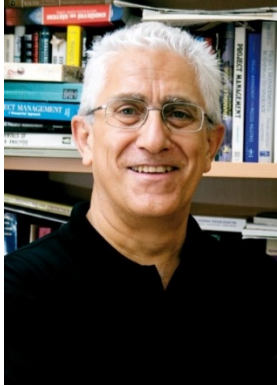
**Abstract:** It is evident that due to fierce global competition and rapid manufacturing technological changes many industrial engineers lag behind in various production, quality, and manufacturing technologies. This has caused a problem to manufacturing firms as they are not easily able to find highly skilled engineers, especially industrial engineers, to satisfy their technological and managerial needs. The aim of this presentation is to report on the case of the Palestinian Industrial

Engineering programs to illustrate how these programs were able to reduce the readiness gap of their industrial engineering graduates to satisfy Palestinian manufacturing sector priorities operating under Israeli occupation restrictions. The presentation discusses the benefits of involving industrial engineering programs stakeholders, especially employers from the manufacturing sector, which is of two-fold. First, the involvement of these employers will help identify their ever evolving general and technical training needs that educational institutions can offer to close training needs gap. Second, their involvement is of significant importance in the process of customizing curriculum of Industrial Engineering programs to help reduce readiness gap of graduates for manufacturing firms' requirements. The presentation highlights the benefits of the requirements of international Accreditation Board for Engineering and Technology (ABET) in the process of readiness gap reduction.

**Biography:** Dr. Ayham Jaaron is Director of Quality Assurance Unit at An-Najah National University, Nablus, Palestine. He is also Director of ABET Centre at the Faculty of Engineering and Information Technology, and assistant professor at the Industrial Engineering Department. He received his PhD degree

(full time) in Manufacturing Engineering and Operations Management from the Wolfson School of Mechanical and Manufacturing Engineering, Loughborough University, England, UK in 2010. He was a full-time instructor at the Industrial Engineering Department of An-Najah National University, Nablus, Palestine from 2005–2007. Dr. Jaaron is recognized for his expertise and contributions to the quality of education in Palestine. He led the largest ABET Accreditation project in the region for seven engineering programs simultaneously at An-Najah National University, that resulted in a successful ABET Accreditation process. He is extensively involved in drawing and planning quality assurance policies for academic programs. His research activities have focused on service operations, service quality, resource utilization, organizational resilience, and human aspects of motivation in the manufacturing and service sectors. He was an Academic Visitor to the University of Strathclyde, Glasgow, UK in 2006. He is also academic visitor to the Wolfson School of Mechanical and Manufacturing Engineering of Loughborough University, England, UK.

4:50 – 5:15 (Tuesday)



**Prof. Dr. Gunduz Ulusoy**  
Faculty of Engineering and Natural Sciences  
Sabanci University  
Orhanli, Tuzla  
Istanbul, Turkey

Gündüz Ulusoy received his BS in mechanical engineering from Robert College, Istanbul in 1970; MS in mechanical engineering from University of Rochester in 1972 and PhD in operations research from Virginia Tech in 1975. He worked as a researcher in Marmara Research Center in 1976. From 1976 to 1999 he was a faculty member in the Industrial Engineering Department of Boğaziçi University, Istanbul. He was a postdoctoral fellow at Lancaster University in 1982. During the years (1984-1985), he was on leave from Boğaziçi University and worked as a manufacturing systems engineer at a white goods manufacturer in Istanbul. He served as the Chairman of the Industrial Engineering Department (1985-1993) and Vice Rector of Boğaziçi University (1992-1994). He was a member of the Executive Committee of the Turkish Scientific and Technical Research Council (1993-1997) and Chairman of the Marmara Research Center (1995-1997). In 1999, he joined the Faculty of Engineering and Natural Sciences at Sabancı University in Istanbul as the Founding Coordinator of the Manufacturing Systems Engineering Program. In 2001, he initiated the Leaders for Industry Program – a double degree joint program between the Faculty of Engineering and Natural Sciences and the Graduate School of Management and was the Co-Director till 2004. In 2003, he founded the TUSIAD – Sabancı University Competitiveness Forum and has served as the Founding Director of the Forum till 2008. Between 2007-2010 he was a member of the Standing Committee on Sustainable Competitiveness of the Manufacturing Industry established by the Office of the Prime Minister of Turkey.

His current research focuses on technology and manufacturing strategies and on scheduling and evolutionary algorithms in production and project management. He has published research articles in Interfaces, Operations Research, Journal of the Operational Research Society, European Journal of Operational Research, International Journal of Production Economics, International Journal of Production Research, IIE Transactions, International Journal of Production and Operations Management, Journal of Operations Management, Computers & OR, and Flexible Services and Manufacturing. He was an Associate Editor of the European Journal of Operational Research (1981-2000) served as a Contributing Editor to the International Abstracts in OR (1978-1992) and is currently on the Editorial Board of the Journal of Operations and Logistics and the Turkish Transactions on Operational Research. He edited several journal issues as Guest Editor and several Conference Proceedings.

He is a founding member of the Informatics Foundation, Science Center Foundation, and Scientific and Technical Research Foundation. During 1994–2000 he served on the Board of Elginkan Foundation. He was the Chairman of the National Quality Award Committee during 1998-2002. He is a member of INFORMS, Turkish Quality Society, Turkish Machine Design and Manufacturing Society, and Turkish Operational Research Society.

## Wednesday (March 9, 2016)

### Session V: Global Engineering Education

8:00 – 9:15 am (Wednesday) - Room Starhill 4

Session Chair: Dr. Jafri Mohd Rohani, Universiti Teknologi Malaysia

08:00 – 08:25 (Wednesday)



#### **Engr. Prof. Adagbonyin Moses O. Obiazi**

Dean, Faculty of Engineering and Technology

Ambrose Alli University

Nigeria

President, African Engineering Deans Council, AEDC

Engr. Prof. Adagbonyin Moses O. Obiazi was born at Agbor in Delta state. He attended the prestigious Ika Grammar School, Agbor from 1974 to 1979 obtaining the West African School Certificate with Distinction. He proceeded immediately to the University of Benin to study Electrical/Electronics Engineering, graduating in 1984 with 2nd Class Hons, Upper Division. He had his Masters Degree in Electrical Engineering from the University of Lagos in 1991 and capped it with a PhD in Electrical Power and Machines from Ambrose Alli University, Ekpoma, supervised by the renowned Engr. Prof. Philip Kuale.

Prof. Obiazi started his working career in the Federal Polytechnic University, Auchi in 1985 after his NYSC in Sokoto State. In the quest for higher levels of engagement, Engr. Obiazi joined the services of then Bendel State University, Ekpoma (now, Ambrose Alli University) in 1987 where he has risen through the ranks from Graduate Assistant to his current status as a Professor of Electrical Engineering and Dean of the Faculty of Engineering and Technology. He was the Head of Department of Electrical/Electronics Engineering [1997-1999], Sub-Dean of the Faculty of Engineering and Technology, Member of the University Senate and Member/Chairman of over 40 University committees/panels. He is currently serving as the Chairman of the Central Bank intervention Projects in Ambrose Alli University.

At the professional level, Engr Prof Obiazi was elected a corporate member of the Nigerian Society of Engineers [NSE] in 1993. As an active member of NSE, he was made Secretary, NSE, Ekpoma Branch from 1994-1997 and Chairman of the Branch for five years (1997-2002). During his Chairmanship, the branch won a national merit award as the Most Improved Branch in Nigeria. In 1999, he was made a life member of NSE. He has been a member of the National Executive Council of NSE from 1997 to 2002 and from 2012 to date. He has served in several committees of NSE at both national and local levels. NSE national committees such as Finance and General purpose Committee, Education and Training Committee, Awards and Endowment Committee, Conference Planning Committee, Codes and Standards Committee among others. As a registered Engineer with COREN (Council for the Regulation of Engineering in Nigeria), COREN in 2006 made him a member of Engineering Regulation and Monitoring (ERM) Committee. He has also served as a member of COREN accreditation team to some eight universities and two polytechnics. For eleven years (2001-2012), he was an External Examiner to the Petroleum Training Institute (PTI), Effurun, and since 2011, External Examiner to Delta State University, Abraka. In 1991, Engr. Obiazi was sponsored by UNESCO to Kumasi, Ghana to present a research paper at an International Engineering Conference, while in 2013, he was sponsored to the Conference of the Global Engineering Deans Council [GEDC] held in Chicago, USA. In 1994, the Delta State Government appointed him as a Member of the Delta State Public Utilities Board (PUB).

In May 2013, Engr. Prof OBIAZI was appointed the National Secretary of the Committee set up by COREN [Council for the Regulation of Engineering in Nigeria] to develop COREN Minimum Benchmarks for the training of Engineers in Nigerian Universities. In 2006, Shell Petroleum Development Company (SPDC) appointed Engr. Obiazi as a research advisor on sabbatical to help with the construction and installation work on the new Afam VI power station in Rivers State. In March, 2010, the Edo State Government appointed Engr. Prof. Obiazi as a member of the Governing council of Edo State Institute of Technology and Management, Usen (a polytechnic), a position he held till Sept, 2012.

Engr. Prof. Obiazi has received several awards from students, staff, religious and professional bodies and groups for outstanding contributions to engineering, education, national development and socio-cultural advancement. Engr. Prof. Obiazi is well published in both local and foreign journals and has presented papers in several local and international conferences.

In Sept, 2012 Eng. Prof .Obiazi was elected the Chairman, Committee of Deans of Engineering and Technology of Nigerian Universities.

8:25 – 8:50 (Wednesday)



#### **Dr. C. B. Gupta**

Professor, Department of Mathematics

Birla Institute of Technology and Science

Pilani(Raj.), India

A recipient of Shiksha Rattan Puraskar 2011, Best Citizens of India award 2011, listed in Marquis who is who in Science and Technology in the world December 2010, 2013 and listed in top 100 scientists of world in 2012, glory of India Award 2013. Dr. Gupta who is presently working as a Professor in the Department of Mathematics, obtained his Master's degree in Mathematical Statistics and Ph.D. in Operations Research from Kurukshetra University, Kurukshetra. His field of specialization is Applied Statistics, Optimization and Operations Research. A number of students have submitted their thesis/ dissertation on these topics under his supervision. He has published a large number of research papers on these topics in peer reviewed national and international journals of repute. He has authored/ co-authored 14 books on the topics Probability and Statistics, quantitative Methods, Optimization in

Operations Research, Advance Discrete Mathematics, Engineering Mathematics, Advance Mathematics etc. He is also on the editorial board and reviewer of a number of national and International journals.



Dr. Gupta is a member on various academic and management committees of many Institutes/ Universities. He has participated in large number of national and International conferences in which he has delivered invited talks and chaired technical sessions. Dr. Gupta has been member of Rajasthan board of school education and also member of various committees of RPSC Ajmer, UPSC, New Delhi and AICTE, New Delhi. He was awarded best paper award at the annual conference of National Academy of Science India held at Calcutta University, Kolkata from 15-17 December 2009.

8:50 – 9:15 (Wednesday)



**Dr. Jafri Mohd Rohani**

Head of the Industrial Engineering Programme  
Department of Materials, Industrial and Manufacturing Engineering  
Faculty of Mechanical Engineering  
Universiti Teknologi Malaysia  
Skudai, Johor, Malaysia

Jafri Mohd Rohani is a Senior Quality and Statistical Engineering Lecturer. He is also Head of the Industrial Engineering Programme at the Department of Materials, Industrial and Manufacturing Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Skudai, Johor. Currently, he is the President of JohorCost and Quality Engineers Society. He is a member of the American Society for Quality (ASQ) and Human Factor Society of Malaysia.

## Session VI: Global Engineering Education

11:30 am – 12:45 pm (Wednesday) - Room Starhill 4

Session Chair: Dr. Rosemary Seva, De La Salle University (DLSU), Manila, Philippines

11:30 – 11:55 (Wednesday)



**Dr. Alfredo Soeiro**

Associate Professor  
University of Porto, Portugal  
Past Academic Director in Civil Engineering  
Past Pro-Rector of the University of Porto for Continuing Education  
Past President - European Society of Engineering Education

Dr. Soeiro has been the representative of Universidade do Porto in Continuing Education and founder of EUCEN (European Universities Continuing Education Network) since November 1991. He was vice president of EUCEN for seven years, a member of the Management Committee and was also founder of RECLA (Latin American Continuing Education Network).

Dr. Soeiro was founder of the Continuing Engineering Education office of the College of Engineering of the University of Porto in 1995; was Pro-Rector of Universidade do Porto in charge of Continuing Education between 1998 and 2003; was founder and President of AUPEC – Portuguese Association of Universities for Continuing Education between 2001 and 2005; from 2001 until 2004 was president of IACEE, International Association of Continuing Engineering Education, Washington DC, USA; between 2003 and 2005 was president of SEFI Societe Europeenne pour la Formation des Ingenieurs; between 2004 and 2008. He was the academic director and vice-director of Civil Engineering of the University of Porto.

Dr. Soeiro was a Fulbright scholar between 1985 until 1989 in the University of Florida to obtain his doctoral degree; between 1996 and 1999 was the President of the Scientific Commission of the Thematic Network THENUCE (Thematic Network on University Continuing Education); from 1999 and 2005 was a member of European ODL Liaison Committee, representing EUCEN; in 2000 was the co-chair of the conference of the Portuguese Presidency of the European Union, Higher Education and New Publics, Porto; from 2002 to 2013 he was member of the Municipal Education Council of the city of Porto, representing the University of Porto and the Higher Education sector; since 1997 until 2004 he has been an invited expert of the European Commission to evaluate projects in adult education and in thematic networks; was an invited expert of Group G of the European Commission within the framework of the Lisboa Objectives between 2002 and 2005. He was an invited speaker at the 800<sup>th</sup> Anniversary of the University of the Sorbonne in the closing session coordinated by the French minister of education, Claude Allègre, entitled the University without Walls, 1998.

Dr. Soeiro published and edited the first ten editions of the newsletter of EUCEN between 1993 and 1997. He was a member of the editorial board of the Journal of Higher Education and Outreach between 2001 and 2006; has published and presented several articles in newspapers and magazines about lifelong learning, continuing education and quality of continuing education; has created and maintained the web pages of EUCEN (between 1994 and 1998) and of AUPEC since 2001; has led several lobbying activities at the European level, like the response to the Memorandum of Higher Education in 1994 and the Response to the European Quality Framework, and at the national level participating in the national meetings of AUPEC; has edited for AUPEC the management manual of centers of continuing education and the survey of industry needs of continuing education. Dr. Soeiro has coordinated, besides participating in others, several European projects sponsored by the European Commission in the areas of adult learning and continuing education and the most important ones are the Tempus project to create the continuing education center at Tallinn Technical University, the Grundtvig project to create individualized pathways Equipe and the project DAETE to develop accreditation methods for continuing education. He was invited professor of Loughborough University, UK in 1997 and 1998, University of Barcelona, Spain in 1994, 1995 and 1996, Polytechnic University of Catalunya, Spain in 2001, Technical University of Vienna, Austria in 2006, 2007 and 2009 in Innovation in Elearning and Visiting Scholar at the Institute of Higher Education, University of Georgia, Athens, USA in 2006 for three months.

Dr. Soeiro has been vice-president and president of the European Society of Engineering Education; he is a member of the board of the European Journal of Engineering Education since 2001; he is one of the two guest editors of the joint edition of EJEE and the Journal of Engineering Education in 2007. Dr. Soeiro has helped the creation of the center of elearning in the University of Porto between 1999 and 2002 including the edition of continuing education

courses in cooperation with other European universities; has coordinated and participated in several European projects in the areas of distance learning and elearning; has authored the second ebook in engineering of the University of Porto with the support of a portal; has authored and coordinated an ebook on construction safety that has been supported by the International Labour Organization. He is the representative of Ordem dos Engenheiros, vice-chair of the European Monitoring Committee of FEANI and chair of the OMP. He was awarded the International Hall of Fame in Adult and Continuing Education title in 2006 and received the award of EDEN Fellow in 2008. Dr. Soeiro received the IACEE Fellow award in 2014. He coordinated some European funded projects Atelcoma (1998), Equipe (2004), Daete (2006), Virqual (2009) and TALOE. He is also member of the reviewers of Campbell Award (2010/2012/2014). He was also a partner in several European funded projects like DIALOGUE, Community Service Engineer and VMCOLAB.

11:55 – 12:20 (Wednesday)



**Dr. Rosemary Seva**

Dean of Gokongwei College of Engineering  
De La Salle University (DLSU)  
Manila, Philippines

Rosemary Seva is a Professor of Industrial Engineering and former Dean at the Gokongwei College of Engineering - De La Salle University, Philippines. She is the current President of the Human Factors and Ergonomics Society of the Philippines (HFESP) and the past President of the Southeast Asian Network of Ergonomics Societies (SEANES). She is one of the Top 150 scholars and scientists in the Philippines from Webometrics. She obtained her doctorate degree at the Nanyang Technological University (Singapore). She has two master's degrees: one in Ergonomics from the University of New South Wales (Australia) and in Industrial Engineering from De La Salle University. She is an ASEAN Engineer and a Professional Industrial Engineer. She has published a number of journal articles on affective design, safety, and usability studies. Her works appear in Applied Ergonomics and International Journal of Industrial Ergonomics.

12:20 – 12:45 (Wednesday)



**Dr. Asela K. Kulatunga**

Senior Lecturer  
Department of Production Engineering  
Faculty of Engineering  
University of Peradeniya  
Sri Lanka

*"Industrial Engineering Education in Sri Lanka"*

Dr. Asela K. Kulatunga currently work as a Post-doctoral Research Fellow at University of Bremen, Germany. He has been serving as a Lecturer since 2007 at the Department of Production Engineering, University of Peradeniya, Sri Lanka and later promoted to Senior Lecturer in 2013. He conducts courses on Industrial Engineering, LEAN Manufacturing, Sustainable Manufacturing and Operations Management in bachelors and Masters Level in University of Peradeniya and some other universities. He holds a doctoral degree in Industrial Engineering from University of Technology, Sydney, Australia and a Bachelor's degree in Production Engineering from University of Peradeniya, Sri Lanka.

Dr. A.K. Kulatunga has served the scientific community by publishing more than fifty publications in leading peer-reviewed international conferences and journals and several books/ book chapters in the areas of Industrial Engineering, LEAN Manufacturing, Sustainable Manufacturing and Operations Management. In addition, he has served as a co-drafter for O-LCA, for UNEP/SETAC Life Cycle Initiative and severed in some UNIDO projects in Sri Lanka. Meanwhile, he has been underwriting the manufacturing industry as an Engineering Consultant for several local manufacturing firms. Besides his academic and industrial involvements he is credited for his valuable contribution to the society through various societal activities. Recently he has been elected as the country representative for IEOM Society in Sri Lanka. Further he holds professional memberships in IEEE, IEOM, ERSCEP and IESL.

**Session VI: Global Engineering Education**

**2:30 – 3:45 am (Wednesday) - Room Starhill 4**

**Session Chair: Dr. Eldon Caldwell, University of Costa Rica**

2:30 – 2:55 (Wednesday)



**Dr. Md. Mizanur Rahman**

Senior Lecturer  
Department of Thermo Fluids  
Faculty of Mechanical Engineering  
University Technology Malaysia (UTM)  
Skudai, Johor Bahru, Malaysia

**Engineering education in energy technology: paradigm shift from technology-centred to multidisciplinary focused**

**Bio: Md. Mizanur Rahman** is currently a Senior Lecturer at Department of Thermo-Fluids, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia UTM, Johor Bahru, Malaysia. Before joining at UTM, he has served as a Postdoctoral Researcher at Aalto University School of Engineering, Finland. Rahman also has more than 12-year working experience in a government statutory body namely Rural Electrification Board (REB), Bangladesh. During his tenure in REB, Dr. Rahman has gathered practical experience in dealing with techno-economic and sociocultural challenges faced by rural electrification programme. He has accumulated deep insights towards the solution pathways for the Global Mega-challenge of having 1.2 billion people without access to electricity yet. Mr. Rahman has sound understanding into the global energy sector challenges and its societal implications. Mr. Rahman received his Ph.D. in Energy Economics and Power plant

Engineering from Aalto University, Finland, M.Sc. in Sustainable Energy Engineering from Royal Institute of Technology KTH, Sweden, and B.Sc. in Mechanical Engineering from Khulna University of Engineering and Technology, Bangladesh. His research interests include rural electrification, energy economics, energy management, energy efficiency and system, sustainable and renewable energy, energy system modelling, Life-Cycle Analysis, distributed power generation, multicriteria evaluation etc. Dr. Rahman has several publications in International referred journals in energy engineering domain.

2:55 – 3:20 (Wednesday)



**Dr. Eldon Caldwell**  
 Director, Industrial Engineering Department  
 Engineering School  
 University of Costa Rica

**Using Robotics as Educational Framework Strategy in Industrial Engineering**

**Abstract:** Industrial engineering evolve, as formal science and as practice, in a world experiencing a faster technological revolution that gave birth to the late nineteenth century. The “core study object” of this discipline is still what I call “the complex production system”; which is present in contexts as diverse as the services sector, the goods producing sector, government organizations and public and private social organizations. One of the main features of these new complex production systems, is undoubtedly cognitive ability in dynamic and chaotic environments so robotic applications appear

as a technological factor. Analyzing the experience at the University of Costa Rica, this conference focuses on how robotics can be used to address collaborative learning, learning through projects and also developing teamwork skills, cognitive skills of abstract conceptualization, computer programming skills and design skills in concurrent environments. Implementing some changes in the curriculum and the didactic strategies, robotics give more pedagogical benefits when we use their principles in order to develop a “pragmatic, statistic, strategic, systemic and frugal” thinking. A preliminary model is presented in this lecture.

**Bio:** Eldon Caldwell, is full professor/ Cathedricus of the University of Costa Rica, Central America; Doctor (Ph.D.) in Industrial Engineering major in *Lean Operations Engineering*. He developed new heuristic sequencing algorithms in order to reduce cycle times and received *Summa Cum Laude* in his doctoral dissertation and Academic Crown Excellence Award in Autonomous University of Central America/ University of Nevada, USA. Currently, he is doctoral researcher at the (Dr. Sc.) Computing Science Program at the University of Alicante, Spain and doctoral researcher at the Dr. Ed. Program at University of Costa Rica, receiving the Academic Excellence Award 2013.

Dr. Caldwell is “Lean Systems Certificated Specialist”, MAPV-University of Nevada, USA, ASQ-Six Sigma Black Belt Certified Trainer, and Spanish publications technical reviewer of Gary Conner, 2002 Shingo Prized. Also, Dr. Caldwell has been recognized by the IEOM Society with the “Outstanding Service Award” for his career of over 25 years as an educator, researcher and promoter of development of industrial engineering. Dr. Caldwell earn his B.Sc. and Master degree in Industrial Engineering at University of Costa Rica (*Summa Cum Laude*) and he earn a Master degree in Service Marketing, as well in Financial Analysis at Interamerican University of Puerto Rico (Costa Rica); M.Sc. Health Management Systems at UNED, Costa Rica and a M.Sc. Operations Management at ITESM, México. He is author of many scientific articles and two books: “Marketing of Social Products and Services”, UCR Pub. and “Lean Manufacturing: Fundamentals and techniques for cycle time reduction”, Kaikaku Institute Press, USA.

Dr. Caldwell served as Operations Manager at MASECA, CA; Lean Manufacturing Project Manager at Eaton Corp. Costa Rica, General Manager at Quirós & Cía-Bandag Inc. and General Manager at Lean Systems Intl., USA. He has 25 years of experience as advisor and consultant in Operations Management, Lean Manufacturing and Lean Logistics at Interamerican Bank for Development, WHO, UN, World Wide Bank, Coca-Cola, Ministry of Health, Costa Rica, Honduras, Panamá, Costa Rican Institute for Electricity, RTC- Perú, Young Electrical Signs, Nevada, USA, AirCare Inc., Reno, Nevada, Plan International-Honduras, and many others. Currently, Dr. Caldwell is Director of Industrial Engineering Department at Engineering School of University of Costa Rica.

3:20 – 3:45 (Wednesday)



**Dr. Pal Pandi Ammavasi, M.E., Ph.D (Engg.), MBA., Ph.D (Mgmt)**  
 Associate Professor  
 Bharath Niketan Engineering College  
 Aundipatty, Tamilnadu, India

**Dr. A. Pal Pandi** is working as an Associate Professor in Bharath Niketan Engineering College, Aundipatty, Tamilnadu, India. He has seventeen years of experience in both academic and industry streams. He has published more than 26 papers in International and National journals including Inderscience, Elsevier and Taylor and Francis. He has published 45 papers in proceedings of international and national conferences held across India. He has a wide range of expertise and knowledge in Mechanical Engineering as well as Management sciences. He holds doctorate degree in both Faculty of Management Sciences and Mechanical Engineering. He also reviewer for some reputed international journals. His area of research is total quality management, quality engineering and manufacturing management. Seven scholars are pursuing research programme under his guidance.

**Session V: Panel Session - Global Engineering Education****4:00 – 5:15 pm (Wednesday) - Room Starhill 4****Panel Chair: Dr. Abu Masud, Wichita State University, Kansas, USA****Panelists****Dr. Abu Masud, P.E.**

Boeing Global Engineering Professor  
 Professor of Industrial and Manufacturing Engineering  
 Wichita State University, Kansas, USA

**Bio:** Dr. Abu Masud is a professor of industrial and manufacturing engineering at Wichita State University. He has been named the Boeing Global Engineering Professor at Wichita State University. In this new post, Dr. Masud is expected to advance the College of Engineering's strategic alliances for global enrichment and experiential learning of students as well as international research collaborations and partnerships. He received Duane and Velma Wallace Outstanding Educator Award from WSU College of Engineering. Previously he was held various positions at Wichita State including associate dean, graduate school (2008-2013), coordinator, college ABET affairs (2006-2008), associate dean, college of engineering (2004-2005), chair, industrial and manufacturing engineering department (1994-2004) and graduate coordinator of IME (1991-94, 1996-98, 2001-2004). Dr. Masud has engaged with various companies and governmental research centers including NASA Langley Research Center, VA, NASA/ASEE Summer Faculty Fellow (1991 and 1992), Boeing, Consulting Analyst, and Kuwait Institute for Scientific Research. He is member of Accreditation Review Council (2011-2014). Dr. Masud published book, book chapters, and numerous journal and conference papers. He is registered Professional Engineer at Kansas State. Dr. Masud is an IIE fellow. He received Ph.D. and M.S. in Industrial Engineering from Kansas State University, and B.S. in Mechanical Engineering from Bangladesh University of Engineering & Technology.

**Dr. Hans-Juergen Hoyer**

Secretary General of the International Federation for Engineering Education Societies (IFEES)  
 Executive Secretary of the Global Engineering Deans Council (GEDC)  
 Resident Scholar in Global Engineering at Marquette University

Hans J. Hoyer is the Secretary General of the International Federation for Engineering Education Societies (IFEES), Executive Secretary of the Global Engineering Deans Council (GEDC), and Resident Scholar in Global Engineering at Marquette University. Former Director of International Programs and Strategy for the American Society for Engineering Education (ASEE) and co-founder of the Indo-US Collaborative for Engineering Education (IUCEE). Prior to 2006, Hans J. Hoyer was CEO of World Links, a spin-off of the World Bank. In this capacity, he worked globally on issues related to secondary education, teachers' education, and on-line collaborative learning focusing on science and social studies among

high school students across the globe.

**Dr. Funso Falade**

Department of Civil & Environmental Engineering  
 University of Lagos, Akoka, Lagos, Nigeria  
 and  
 President, African Engineering Education Association

**Bio:** Falade Funso Alphonsus is a Nigerian and a Professor of civil engineering at University of Lagos, Nigeria. He earned Diploma in Quantity Surveying at Yaba College of Technology, Nigeria, in 1978. He completed his M.Sc (Civil Engineering) at the Moscow Institute of Civil Engineering in the USSR in 1984 and obtained PhD in Civil Engineering, from University of Lagos in 1998. Prof. Falade has authored over 70 articles on innovative construction materials and engineering education published in locally and internationally reputable journals as well as in proceedings of learned conferences. He has also made contributions to two (2) textbooks. In February, 2014, he made public presentation of a book titled 'Strengthening of Distressed Buildings'. He has researched into the structural properties of bamboo and developed the technology for its successful incorporation as replacement of steel reinforcement in some structural elements. He has also researched extensively on Foamed Aerated Concrete. Prof. Falade has presented over 45 papers at workshops and seminars on such topics as Project Management, Quality Control, Maintenance of Facilities, and Contract Procurement Processes etc.

Prof. Falade is a member of some professional bodies both locally and internationally, including Fellow, The Nigerian Academy of Engineering, Fellow, Nigerian Society of Engineers, Fellow, African Engineering Education Association, Registered Engineers, Council for the Regulation of Engineering in Nigeria etc. He is a promoter of engineering education. He was the initiator of African Regional Conference on Engineering Education and the Chairman, Organizing Committee and the Editor of the Proceedings of the 1<sup>st</sup>, 2<sup>nd</sup> and 5<sup>th</sup> African Regional Conference on Engineering Education that were held at University of Lagos in 23<sup>rd</sup> – 25<sup>th</sup> September, 2002, 20<sup>th</sup> – 22<sup>nd</sup> September, 2004 and 9<sup>th</sup> -12<sup>th</sup> September, 2013 respectively. He is the President of the African Engineering Education Association (AEEA) and former Vice-President, international Federation of Engineering Education Societies (2009-2012). He was appointed UNESCO Consultant in 2005.



**Hulas King**

Director, Diversity, Professional Affiliations & Global Community Relations  
Siemens PLM Software  
St. Louis, Missouri, USA

Hulas is responsible for the strategy and operational leadership of Siemens PLM Software Global Diversity Council. He also leads Professional Affiliations & Global Community Relations Teams, driving innovation and digitalization value for youth, displaced workers, strategic customers and business partners. Mr. King is a decorated Vietnam veteran, a Certified Manufacturing Engineer and a Certified NC Manager. He was inducted into the African-American Biographies Hall of Fame for outstanding contributions in Business and Engineering. He represents SIEMENS on several professional boards including the Institute of Industrial Engineers, the Society of Manufacturing Engineers, Advancing Minorities' Interest in

Engineering, the Stone Soup Foundation, the Accreditation Board for Engineering & Technology (ABET), the International Federation of Engineering Education Societies (IFEES) and the Professional Business Leadership Council. He travels extensively within the Americas, Europe, the Middle East and Asia Pacific, speaking at various technical seminars in support of Global Opportunities in PLM.

Hulas managed the GO PLM (Global Opportunities in Product Lifecycle Management) program, nurturing strategic partnerships that provide significant added value for academic institutions, youth development programs and our global communities. These partnerships exemplify SIEMENS as the PLM Industry Leader and are successful in developing technology environments where underutilized citizens of the world can work together to improve their economic conditions and promote peace. He served as McDonnell-Douglas' Program Manager for Enterprise Life-Cycle Processes for Team Columbus Engineering / Manufacturing in support of C-17 Production in Columbus, OH.

**Education**

- \* Belleville Area College, 1970: AS, Data Processing
- \* Southern Illinois University, Edwardsville, 1972: BS, Management Science/Data Processing
- \* Southern Illinois University, Edwardsville, 1974: MBA, Marketing and Business Administration
- \* Southern Illinois University, Edwardsville, 1975: MS, Government/International Relations.
- \* Southern Illinois University, Edwardsville, 1978: MS, Management Science and Systems
- \* Southern Illinois University, Edwardsville, 1979: SPC, Health Care Management Systems
- \* University of Missouri - Columbia, 1983: MS, Industrial Engineering

## Thursday (March 10, 2016)

### Session IX: Global Engineering Education

8:00 – 9:15 am (Thursday) - Room Starhill 4

Session Chair: **Dr. Khairiyah Mohd Yusof**, Universiti Teknologi Malaysia

8:00 – 8:25 (Thursday)

**Khairiyah Mohd Yusof, PhD**

Director, Centre for Engineering Education (CEE)

Universiti Teknologi Malaysia

Johor Bahru, Malaysia



Dr. Khairiyah Mohd-Yusof is the Director of Universiti Teknologi Malaysia (UTM) Centre of Engineering Education (CEE), promoting meaningful research and scholarly practices in engineering education and managing the PhD in Engineering Education program. She obtained her PhD in Chemical Engineering for the University of Waterloo, Canada. Prior to becoming the Director of CEE, she was the Deputy Director at the Centre for Teaching & Learning (2008 – 2011), and Head of the Chemical Engineering Department (2006-2008). An Associate Professor in the Department of Chemical Engineering, Dr. Khairiyah is regularly invited as a speaker in various conferences and workshops in Asia, Europe and North America. She conducts research and receives funding for her work in engineering education, and dynamic process modeling and control. Dr. Khairiyah has also won several awards, including the Diamond Award for Best Paper at the 2005 UNESCO International Centre of Engineering Education Asia Pacific Conference on Engineering Education in Bangkok, Thailand, the Best Paper Award at the 2011 IEEE Global Engineering Education Conference in Amman, Jordan, the 2013 Institution of Chemical Engineers Malaysia Award for Education and Training and the Best of the Best Award at the 2014 Innovative Practices in Higher Education Exposition in Johor Bahru, Malaysia. Currently, Dr. Khairiyah is an Editor for the ASEAN Journal of Engineering Education, an Associate Editor for the Journal of Engineering Education, and is in the Editorial Board for the Journal of Problem Based Learning in Higher Education and the IChemE Education for Chemical Engineers Journal. She is also a Master Trainer for the Higher Education Leadership Academy (AKEPT) under the Malaysian Ministry of Education, the Secretary for the Society of Engineering Education Malaysia (SEEM), and board member representing Asia for the Research in Engineering

Education Network (REEN). Dr. Khairiyah had chaired and organized various Engineering Education Conferences in Malaysia, including the 2013 International Research Symposium on PBL in collaboration with the Aalborg University UNESCO Chair on PBL in Engineering Education and AKEPT, and the 2013 Research in Engineering Education Symposium in collaboration with REEN, AKEPT and SEEM.

8:25 – 8:50 (Thursday)

**Dr. Amar Partap Singh Pharwaha**

Professor

Department of Electronics &amp; Communication Engineering

Sant Longowal Institute of Engineering & Technology (SLIET)-Deemed University  
Longowal, Sangrur, Punjab, India**Virtual Instrument for Monitoring Process Parameters: A Versatile Tool for Engineering Education**

**Abstract** - With the advent of interactive multimedia programming languages and the world-wide-web (www), it has now become possible to build virtual laboratories that can be accessed globally. Virtual laboratory facilitates to offer experiment-oriented problems without the overhead incurred when establishing a complete hardware-based laboratory. Based on these considerations, the present work reports the development of a new type of Virtual Instrument (VI) for monitoring process parameters, which may also be used as an educational tool. The proposed VI is designed using fourth generation object-oriented programming technology. The executed user-interactive VI fulfills the requirements of efficient data acquisition, management and presentation. It is designed as an integrated system using five different virtual instruments. Each of the five virtual instruments was designed as an independent standalone system to serve a particular application. These dedicated virtual instruments were examined independently for their performance. Ultimately, these VIs were integrated to synthesize the proposed VI for versatile applications of transducer modeling including estimation of static-nonlinearity of transducers, transducer linearization, self-compensation in transducers and fault detection in transducers based systems. Such applications are required frequently in Data Acquisition System (DAS) connected Transducers in computer based instrumentation.

**BIO:** Dr. Amar Partap Singh, was born in Sangrur, Punjab in 1967 & received his B. Tech. (Electronics Engineering) in 1990 from Guru Nanak Dev University, Amritsar, M. Tech. (Instrumentation) in 1994 from Regional Engineering College (now NIT), Kurukshetra & Ph.D. on Intelligent Instrumentation in 2005. Presently, he is Professor (Electronics & Communication Engineering) and Part-time Chief Vigilance Officer (appointed by Govt. of India) at Sant Longowal Institute of Engineering & Technology (SLIET-Deemed University, established by Govt. of India), Longowal. Dr. Singh is credited with a professional experience of more than 24 years including the position of Research & Development Engineer, Dean (Student & Faculty Welfare), Dean (Planning & Development), Head (Department of Electronics & Communication Engineering), Head (Department of Electrical & Instrumentation Engineering) and Professor & Joint Director at Yadavindra College of Engineering, Punjabi University Guru Kashi Campus, Talwandi Sabo. He has guided seven Ph. D. Theses and six more are under his supervision for Ph.D. degrees. He preferred to remain active in his passion for research teaching instead of joining to the Post of Director, Punjab University Regional Center, Hoshiarpur, for which he was also selected in 2008. He has published more than 170 Research Papers in various National & International Journals/Conferences and received various awards including IETE Students Journal Award-2006 by Institution of Electronics and Telecommunication Engineers, New Delhi, Certificate of Merit by the Institution of Engineers (India) in 2006, KF Antia Award by the Institution of Engineers (India) in 2009, Sir Thomas Ward Award by the Institution of Engineers (India) in 2010 & again KF Antia Award by the Institution of Engineers (India) in 2014. Dr. Singh has the honour of being elected for the third time as member of the State Committee of Institution of Engineers (India), Punjab & Chandigarh State Centre. He is a Fellow of Institution of Engineers (India) as well as Institution of Electronics & Telecommunication Engineers. He is also the Life Member of Punjab Academy of Sciences, Instrument Society of India, Metrology Society of India, Indian Society for Technical Education & International Association of Engineers (Hong Kong). He has visited a number of countries including US, UK, France, Australia, Singapore & Pakistan.

8:50 – 9:15 (Thursday)

**Dr. Funso Falade**

Department of Civil &amp; Environmental Engineering

University of Lagos, Akoka, Lagos, Nigeria

and

President, African Engineering Education Association

**Session X: Global Engineering Education****11:30 am – 12:45 pm (Thursday) - Room Starhill 4****Session Chair: Dr. S. C. Naik**, National Institute of Technology, Rourkela, Odisha, India

11:30 – 11:55 (Thursday)

**Kamel Hawwash**, BSc, MSc, MAPM, FHEA

Professor in the School of Civil Engineering

University of Birmingham, UK

Immediate Past President of SEFI

Member of the European Engineering Deans Council

Kamel Hawwash is Professor in the School of Civil Engineering and Immediate President of the European Society for Engineering Education, SEFI. He is the Convenor of the long-established MSc Construction Management Programme. He was Head of the School of Civil Engineering from 2008 to 2011. Between 2009 and 2012 he was the Regional Director for the Midlands and East Anglia for the National HE STEM Programme.

Professor Hawwash is past Chair of the Association of Civil Engineering Departments, and member of the Engineering Education, Employability and Skills sub-committee of the Engineering Professors' Council and Associate of the Engineering Council, UK.

He is a Fellow of the Higher Education Academy and a Member of the Association of Project Management. Professor Hawwash received MSc in Civil Engineering from UMIST in 1987 and BSc (Hons) in Civil Engineering from UMIST in 1985.

11:55 – 12:20 (Thursday)



**Dr. Charles Mbohwa**

Professor and Vice-Dean Postgraduate Studies, Research and Innovation  
Faculty of Engineering and the Built Environment (FEBE)  
University of Johannesburg's (UJ)  
South Africa

**Bio:** Professor Charles Mbohwa is the Vice-Dean Postgraduate Studies, Research and Innovation at University of Johannesburg's (UJ) Faculty of Engineering and the Built Environment (FEBE). As an established researcher and professor in the field of sustainability engineering and energy, his specializations include sustainable engineering, energy systems, life cycle assessment and bio-energy/fuel feasibility and sustainability with general research interests in renewable energies and sustainability issues. Professor Mbohwa has presented at numerous conferences and published more than 150 papers in peer-reviewed journals and conferences, 6 book chapters and one book. Upon graduating with his B.Sc. Honors in Mechanical

Engineering from the University of Zimbabwe in 1986, he was employed as a mechanical engineer by the National Railways of Zimbabwe. He holds a Masters in Operations Management and Manufacturing Systems from University of Nottingham and completed his doctoral studies at Tokyo Metropolitan Institute of Technology in Japan. Prof Mbohwa was a Fulbright Scholar visiting the Supply Chain and Logistics Institute at the School of Industrial and Systems Engineering, Georgia Institute of Technology, is a fellow of the Zimbabwean Institution of Engineers and is a registered mechanical engineer with the Engineering Council of Zimbabwe. He has been a collaborator to the United Nations Environment Programme, and Visiting Exchange Professor at Universidade Tecnológica Federal do Paraná. He has also visited many countries on research and training engagements including the United Kingdom, Japan, German, France, the USA, Brazil, Sweden, Ghana, Nigeria, Kenya, Tanzania, Malawi, Mauritius, Austria, the Netherlands, Uganda, Namibia and Australia.

12:20 – 12:45 (Thursday)



**Dr. S. C. Naik**

Professor, Former Head of Chem Engg and Dean  
National Institute of Technology, Rourkela, Odisha, India  
Past President, The Institution of Engineers  
Past Vice-President, The Federation of Engineering Institutions in South & Central Asia

"Engineering Education and Environment"

Professor S C Naik obtained his BTech, MS & PhD degrees-all in Chemical Engineering from the Universities of Madras, Ottawa and UK (Swansea, Wales) respectively. He taught at the National Institute of Technology, Odisha State, India where Dr. Naik was Head of the Department and Dean. He guided many Research Fellows, some medium scale Industries and helped in establishment of an Engineering College. Dr. Naik authored/co-authored some books, published many papers in International and National Journals and presented papers in several countries. He was a Keynote Speaker at the Technical Events in Sri Lanka, South Korea, some Gulf countries, Naples, Tokyo and San Francisco in 2006. Dr. Naik was a Consultant to a prestigious Journal.

Dr. Naik was a President of The Indian Institution of Engineers, one of the largest professional bodies in the world, a Vice President of The Federation of Engineering Institutions of South & Central Asia and a Council Member of The Indian Institute of Chemical Engineers. He is a well-known writer in his own mother tongue, Odiya and has published several social novels, a book with one hundred poems and several articles for which he has been felicitated by his State Literature Academy and his name has found place in Central Literature Academy. Dr. Naik is associated with many Committees at the State and Central levels. Professor Naik has a deep involvement in social service for which he has been even appreciated by a world-based organization. For his achievements, he has been awarded and appreciated by Regional, State, Central and Global organizations.

**Session XI: Global Engineering Education**

2:30 – 3:45 pm (Thursday) - Room Starhill 4

**Session Chair:** Dr. Hamid Parsaei, Texas A&M University

2:30 – 2:55 (Thursday)



**Professor Khedidja ALLIA**

Research Laboratory of Science in Industrial Process Engineering (LSGPI)  
USTHB - FGMGP, Bâb-Ezzouar  
Algiers- Algeria

Khedidja Allia is a Chemical Engineering Professor and research director at the University of Sciences and Technology (USTHB), Algiers. She holds engineer diploma and Doctorate Es Science in Chemical Engineering at National Polytechnic School, Algiers (ENP) and part at Thames Polytechnic – London-UK. She is engaged in the supervision of students at different levels (Doctorates, Magisters, masters), and lectured at the USTHB (Algiers) and she is member of Scientific committee of the faculty. Pr Khedidja Allia published several scientific works in the fields of chemical and environmental engineering (Multiphase flow, Pneumatic conveying, fluidization, semi fluidization and wastewater treatment, solid wastes, ...), and has been and is involved with a number of research projects and was a Fulbright Researcher at Mechanical department and Aerospace

Engineering, Cornell University, Ithaca, New York, USA. She occupied several posts as; Director of Higher Education (MESRS), Director of Industrial chemistry institute USTHB and President of Scientific Committee - Industrial Chemistry institute, Head of Chemical Engineering Department at the National Polytechnic school of Algiers (E.N.P), and Researcher at Research and Development Direction at SONATRACH. She took part at many commissions on the higher education reforms, and she was the National Coordinator of « the higher education Commission (Technology) of "Maghreb Equivalence", and president of PURAQ (Pôle Universitaire et de recherche Algéro-Québécois). For her achievements, she has been awarded and appreciated by State and Global Institutions.

2:55 – 3:20 (Thursday)

**Shri. Mahesh Anant Kakade, MIE, MISTE, MIV, MIEEES**

Controller of Examinations, Shivaji University, Kolhapur

Chairman, Indian Society for Technical Education

Maharashtra- Goa Section, India

3:20 – 3:45 (Thursday)



**Dr. Hamid Parsaei, PE**

Professor of Industrial and Systems Engineering  
Texas A&M University (College Station)

and

Professor of Mechanical Engineering and  
Director of Academic Outreach  
Texas A&M University Qatar

**Bio:** Hamid R. Parsaei is Professor of Industrial and Systems Engineering at Texas A&M University (College Station) and also Professor of Mechanical Engineering and Associate Dean for Academic Affairs at Texas A&M University at Qatar. He is a registered professional engineer (PE) in Texas, a Fellow of the Institute of Industrial Engineers (IIE), and a Fellow of the American Society for Engineering Education (ASEE). He has published over 200 articles in peer-refereed archival journals and conference proceedings. He has also served as editor/co-editor in chief for four academic journals and five book series. His research, in excess of \$22 million, has been funded by numerous government and private institutions.

## Session XII: Global Engineering Education

4:00 – 5:15 pm (Thursday) - Room Starhill 4

**Session Chair:** Nidhi M B, MarBaselios College of Engineering & Technology (MBCET), Thiruvananthapuram, Kerala, India

4:00 – 4:25 (Thursday)



**Nidhi M B**

A/HoD Mechanical Engineering Department  
MarBaselios College of Engineering & Technology (MBCET)  
Thiruvananthapuram, Kerala, India  
National Executive Council Member ISTE

### Enhancing outcome Based Education through Self awareness

Prof. Nidhi M B is currently working as Assistant Head of dept. Mechanical Engineering Dept. of Mar Baselios College of Engineering and Technology, Trivandrum, Kerala. She is also in the capacity of National Executive Council Member of ISTE (Indian Society for Technical education) (2015-2018) and joint Secretary to IIIE (Indian Institution of Industrial Engineers, Kerala chapter) (2011-2012, 2014-2015, 2015-2016). She has been serving as State Management Committee Member ISTE Kerala section from 2012-2015. Apart from the above responsibilities she has consistently initiated the release of Kerala Section Newsletter for the last 5 years, in the capacity as Newsletter Editor. She has gained appreciation by the Kerala Section for the efforts to promote ISTE. She has been instrumental in bridging the Industry Academia Gaps,

and she is co-coordinating 5 projects with industry apart from current teaching responsibilities on the interest of the Institution. Ms Nidhi MB has been a special invitee to GEDC (Global Engineering Deans Council Summit), Singapore. She has been instrumental in initiating ISTE Faculty and Student Chapters in MBCET and currently the Chairman of ISTE-MBCET Chapter. Under her leadership the ISTE Chapter has organised many events for the benefit of students and Faculty. The Chapter has won 5 awards within the short span of 2.5 years. She has delivered many Keynotes addresses and Invited Lectures at State, National and International forums. She has to her credit 26 papers in National, International Journals and Conferences of which 8 papers are in education research. She is also reviewer of journals and conferences in areas relating to Sustainability in Engineering, Supply Chain Management, Engineering & Technology trends in Mechanical Engineering, etc. Her areas of interest include Pedagogy and Training, Outcome Based Education, Changing roles of Industrial Engineering, Design and Engineering, Green Supply Chain Management etc.

She graduated from the SCT College of Engineering in BTech Mechanical Production in the year 2001. She worked in Industry Leela Lace International Ltd, as Industrial Engineer for 3 years. There by developing a passion for Industrial Engineering, she pursued her Master's Degree in Industrial Engineering from CET, Kerala, (2006-2008). Since then she started her career in Engineering Education as lecturer, Sr Lecturer and as Asst. Prof with Saintgits College and Mar Baselios College of Engineering and Technology. She has also won many Best Paper Awards in various forums of International conferences and National Conventions. She is also serving as mentor to other ISTE chapters in Kerala. She is currently pursuing her research at the National Institute of Technology Calicut on Sustainability.



4:25 – 4:50 (Thursday)

**Dr. P. Muredzi**

Dean – School of Engineering & Technology  
Harare Institute of Technology  
Zimbabwe

Perkins Muredzi is currently the Executive Dean of the School of Industrial Sciences and Technology and School of Engineering and Technology at the Harare Institute of Technology, Harare, Zimbabwe and a 2015 Global CIMA Award winner in “education Leadership” conferred at the 2015 World Education Congress, Mumbai, India. He graduated with a BSc, MSc in Food Processing Engineering from Krasnodar Institute in the Russian Federation in 1991 and obtained a Master's degree in Intellectual Property from Africa University in 2009 before attainment of his PhD qualification. Dr Muredzi teaches Food Engineering in undergraduate, certificate and diploma programmes and also teaches Intellectual Property in the Master of Intellectual Property degree programme being run jointly by Africa University, the World Intellectual Property Organisation (WIPO) and the African Intellectual Property Organisation (ARIPO). He has published 8 books, his first being one published by CBH publishers (USA) entitled “Emerging Non-Thermal Food Processing Technologies” and two of which are text books for “A” Level Food Science and a text book for postgraduate students studying Food Science and Technology. He is a member of ZEC (Zimbabwe Energy Council) IUFOST, EFFoST, IFT (USA) and sits in various national bodies like the Research Council of Zimbabwe grants committee, symposium organising committee, the Harare Polytechnic B Tech Programme Board of studies, NAMACO sectorial committee on Food Processing, ZIMCHE's RIE-SET organising committee, Zimbabwe Intellectual Property Development Trust and various SAZ standards development technical committees among others. He is the current chairman of the research board and member of the editorial committee of the Journal of Science, Technology, and Technopreneurship (JSTT) of the Harare Institute of Technology. Dr.Muredzi currently sits on Editorial Boards of the following Journals:

- Journal of Biological, Pharmaceutical and Chemical Research
- Journal of Leadership and Management Studies; Department of Management and Project Management; Cape Peninsula University of Technology
- International Journal of Science, Technology, and Society.
- American Journal of Nutrition and Food Science

4:50 – 5:15 (Thursday)

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